MOTOMAN XRC
USER'S MANUAL
MotoDCI32

Upon receipt of the product and prior to initial operation, read these instructions thoroughly, and retain for future reference.

MOTOMAN ROBOTICS EUROPE
A subsidiary of YASKAWA Electric Corporation

MANUAL NO. MRS55120

Reference list

Basic Operator's Manual
Windows User's Manual

Revision

000316
Preliminary issue of this manual.

000704
Second preliminary issue of the manual MotoDCI32, made with same texts as used for orginal manual (Scanned document).

000706
Brand new version of this manual (based on support file).

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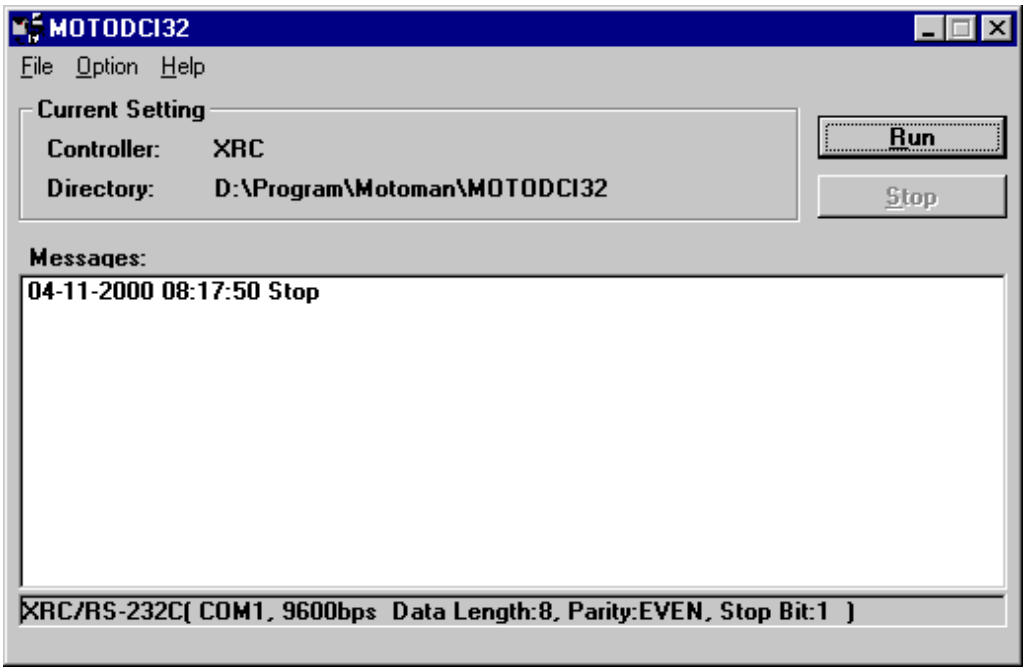
MotoDCI32 (32-bit)

Manual valid for MotoDCI32 (Motoman part No. 441141-99).



1. General

MotoDCI is a 32-bit PC-software, for Windows (95/98 0r NT) environment.

The purpose with MotoDCI is to make it possible for the robot controller to use a PC as external memory. The memory use is possible at PLAY mode.

By using the DCI-instructions LOADJ and SAVEJ in the robot job, job can be loaded / stored / saved from / to the PC.

The DCI-functions can be used if the robot memory is full or if some jobs has to be updated within operation.

While communication parameters have been set on both robot and PC, the MotoDCI software is started on the PC. MotoDCI will execute instructions told by the robot controller.

For more basic information about installation and handling of the software, icons, menu bars, etc. refer to the operator's manual for Windows 95/98 or Windows NT.

✔ This manual shall always be available to operator.

✔ This User's Manual comprises information about

✔ Installation / Setup / Handling / operation for XRC robot controller

✔ Text written in **BOLD** letters means command, icon or button.

✔ Text written in *ITALIC* means text shown on display.

1.1 Copyright

The diskettes for MotoDCI32-program may not be copied or imparted to a third party nor be used for an unauthorized purpose. Copies may be done only for own backup.

This manual may not be copied or imparted to a third party nor be used for an unauthorized purpose.

1.2 MotoDCI32-kit

■ ***MotoDCI-kit comprises***

✔ Diskettes (for MotoDCI and drivers) or CD-ROM

✔ Hardware key

✔ One manual

✔ One registration card

■ ***MotoDCI-kit does not comprise***

✔ Cables or adapters, etc.

■ ***Further you may have need for***

✔ Programming manual for your robot controller.

✔ Operator's manual for Windows 95/98 or Windows NT.

1.3 Hardware Requirements for MotoDCI32

The MotoDCI32 operates with the configurations shown in Table 1.

OS	Microsoft Windows 95 / 98 or NT4.0
CPU	Pentium or pentium compatible processor
Required memory	16 Mbyte or more
Hardware disk capacity for installation	30 Mbyte or more
Disk drive	Hard disk and CD-ROM drive
Display	Supported by MS Windows
Mouse	Supported by MS Windows
Robot controller	YASNAC XRC, MRC, MRC2, ERC, ERC2
Transmission cable	Ethernet cable or RS232C cable
Hardware lock key	Single user registration. If an conversion adapter is required, refer to "Hardware Lock Key" for details.

Note!

1) A personal computer, transmission cable, and OS are not included with this software.

2) Use either an RS-232C cable or an Ethernet cable for transmission, depending on the data transmission function specifications set in the robot controller manuals. Before starting this software, check the hardware and software specifications of the robot controllers.

3) Ethernet transmission is not available for the YASNAC ERC / ERC2 since they do not support the Ethernet function.

2. Software installation

Note
This chapter shows a general installation phase of any software. In this example the software FDDWIN is installed. Select the right software by choosing the appropriate software name.

2.1 Installation

There are three ways to start installation of this software, all will give the same result. The most common way is described below.

a) Put the first diskette named #1 in the disk-drive.

b) Click on the **Start** button on the menu-bar.

c) Choose **Run** from the menu.

d) Browse to drive **A:**

e) Choose the file named **SETUP.EXE**

f) Click **OK**.

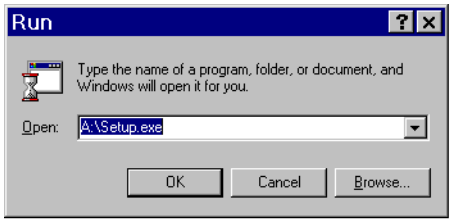


Fig.1 Choose installation file

g) Choose **OK** and the installation guide will start.

h) You can quit the installation att any time by clicking the **Cancel**-button and then confirm by **Yes**-button.

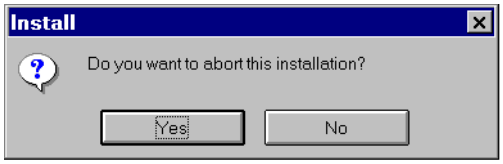


Fig.2 You can cancel installation at any time

i) Mark the language you want to use during installation. ***Note!*** This will not influence the language you use in FDDWIN32 later.

j) Click on the **OK**-button.

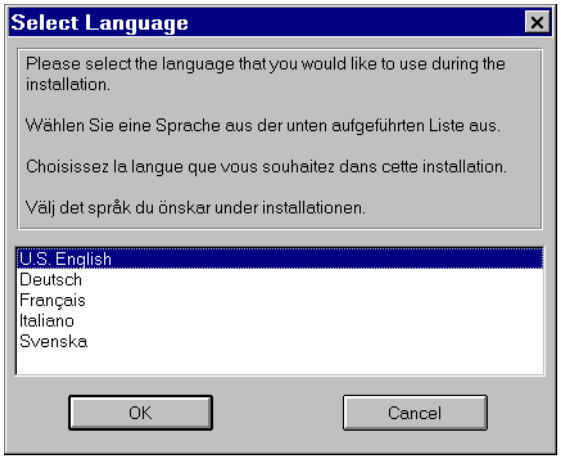

Select Language
Please select the language that you would like to use during the installation.
Wählen Sie eine Sprache aus der unten aufgeführten Liste aus.
Choisissez la langue que vous souhaitez dans cette installation.
Välj det språk du önskar under installationen.
U.S. English
Deutsch
Français
Italiano
Svenska
OK
Cancel

Fig.3 Language selection during installation

k) Pass this information screen by clicking the **Next**-button.

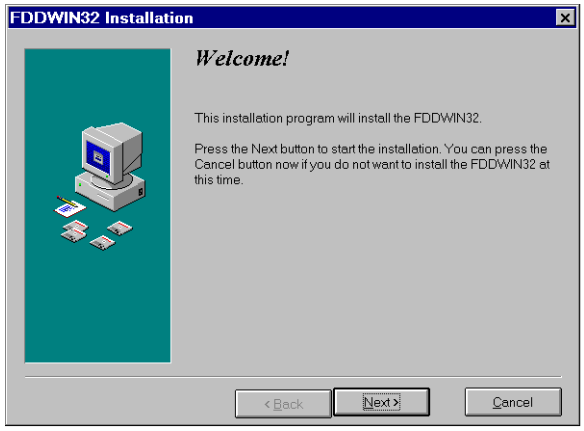

FDDWIN32 Installation
Welcome!
This installation program will install the FDDWIN32.
Press the Next button to start the installation. You can press the Cancel button now if you do not want to install the FDDWIN32 at this time.
< Back
Next >
Cancel

Fig.4 Information screen

l) Read through the license agreement and accept by clicking on the Next-button.

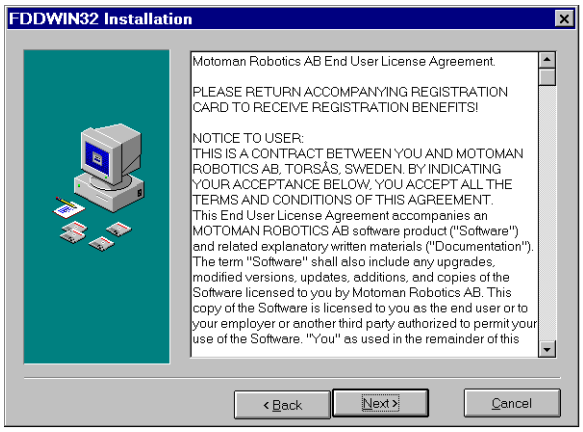

FDDWIN32 Installation
Motoman Robotics AB End User License Agreement.
PLEASE RETURN ACCOMPANYING REGISTRATION CARD TO RECEIVE REGISTRATION BENEFITS!
NOTICE TO USER:
THIS IS A CONTRACT BETWEEN YOU AND MOTOMAN ROBOTICS AB, TORSÅS, SWEDEN. BY INDICATING YOUR ACCEPTANCE BELOW, YOU ACCEPT ALL THE TERMS AND CONDITIONS OF THIS AGREEMENT.
This End User License Agreement accompanies an MOTOMAN ROBOTICS AB software product ("Software") and related explanatory written materials ("Documentation"). The term "Software" shall also include any upgrades, modified versions, updates, additions, and copies of the Software licensed to you by Motoman Robotics AB. This copy of the Software is licensed to you as the end user or to your employer or another third party authorized to permit your use of the Software. "You" as used in the remainder of this
< Back
Next >
Cancel

Fig.5 License agreement. Accept by clicking Next.

m) Set directory for FDDWIN32. It's advisable to install the software in the directory which is set as default by the installation guide.

n) Accept by clicking **Next**-button.

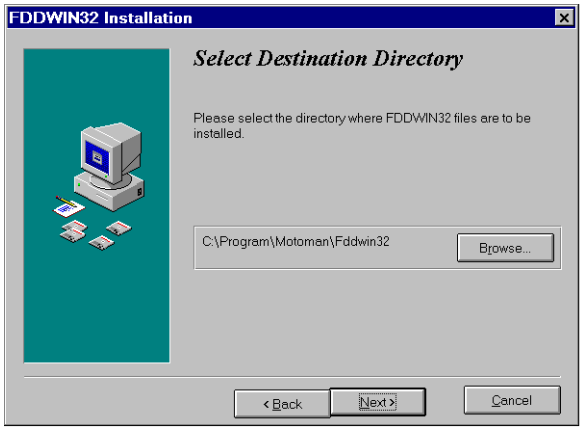


Fig.6 Choose directory

o) Accept installation process by clicking **Next**-button.

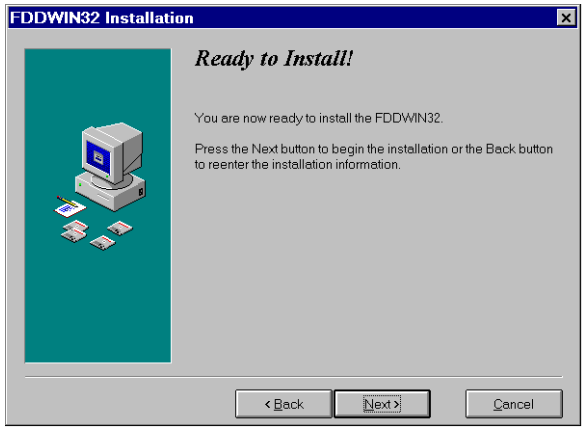

FDDWIN32 Installation
Ready to Install!
You are now ready to install the FDDWIN32.
Press the Next button to begin the installation or the Back button to reenter the installation information.
< Back
Next >
Cancel

Fig.7 Start installation

p) Installation starts.

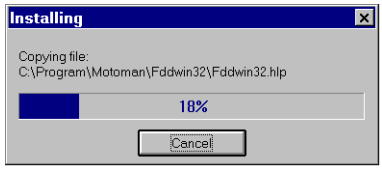


Fig.8 Installation progress counter

q) After some time you are told to enter disk #2/2.

r) Insert disk and click on OK-button.

Fig.9 Insert disk #2

s) The installation is finished and the last screen appears.

t) Accept installation by clicking the **Finish**-button.

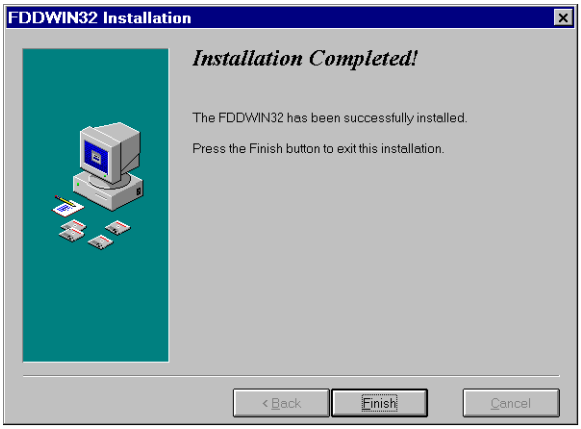


Fig.10 Installation complete

u) Before it is possible to run the software, the hardware key must be installed on the parallel port.

2.2 After installation

After installation, fill in and return the registration card to Motoman Robotics AB.

During installation the main directory is automatically created and all necessary files are installed in the specified drive.

In the end of the setup a program group (MOTOMAN) and a icon is created. To start FDD for Windows just double-click on the **Start Menu**.

If you want to create a shortcut to FDDWIN32, see Windows manual for further information

2.3 Uninstall

As in all WIN95/NT softwares there are an uninstall facility if you want to remove the software from the hard disk.

a) Start the **Control panel** from the start menu. Select **Add/Remove** button from the menu.

b) Mark the line **FDDWIN32** from the menu.

c) Click **Add/Remove** button.

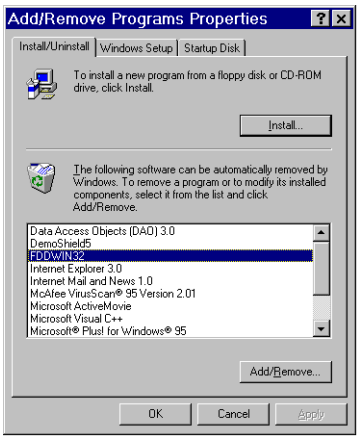

Add/Remove Programs Properties
Install/Uninstall
Windows Setup
Startup Disk
To install a new program from a floppy disk or CD-ROM drive, click Install.
Install...
The following software can be automatically removed by Windows. To remove a program or to modify its installed components, select it from the list and click Add/Remove.
Data Access Objects (DAO) 3.0
DemoShield5
FDDWIN32
Internet Explorer 3.0
Internet Mail and News 1.0
McAfee VirusScan® 95 Version 2.01
Microsoft ActiveMovie
Microsoft Visual C++
Microsoft® Plus! for Windows® 95
Add/Remove...
OK
Cancel
Apply

Fig.11 Mark the FDDWIN32 software

d) Activate uninstall guide by **Next**-button.

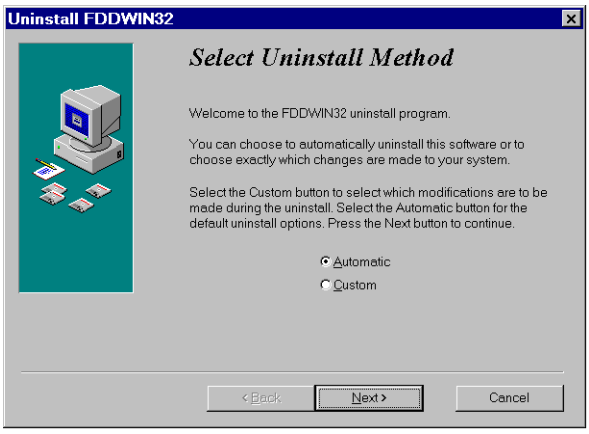

Uninstall FDDWIN32
Select Uninstall Method
Welcome to the FDDWIN32 uninstall program.
You can choose to automatically uninstall this software or to choose exactly which changes are made to your system.
Select the Custom button to select which modifications are to be made during the uninstall. Select the Automatic button for the default uninstall options. Press the Next button to continue.
Automatic
Custom
< Back
Next >
Cancel

Fig.12 Automatic uninstall

e) End the operation by clicking the **Finish**-button.

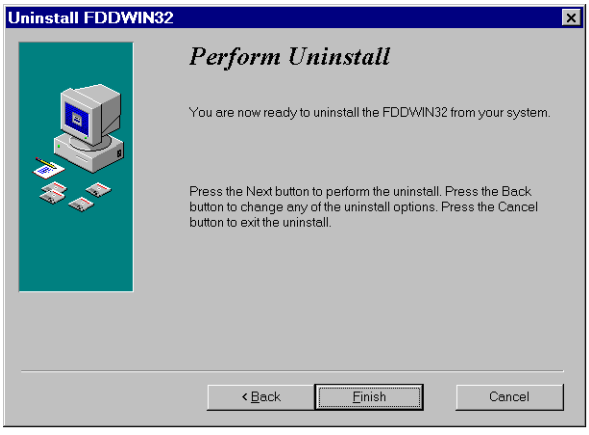

Uninstall FDDWIN32
Perform Uninstall
You are now ready to uninstall the FDDWIN32 from your system.
Press the Next button to perform the uninstall. Press the Back button to change any of the uninstall options. Press the Cancel button to exit the uninstall.
< Back
Finish
Cancel

Fig.13 Uninstall

3. Introduction

3.1 Introduction of this manual

This operation manual is for the users of the data transmitting function of industrial robot MOTOMAN controller YASNAC XRC, MRC, MRC2, ERC, and ERC2.

This operation manual outlines the operation method of the personal computer software MotoDCI32 for data transmission between the robot controller and a personal computer, and at the same time, the specifications of the supplied data transmission function.

Read this operation manual thoroughly before use.

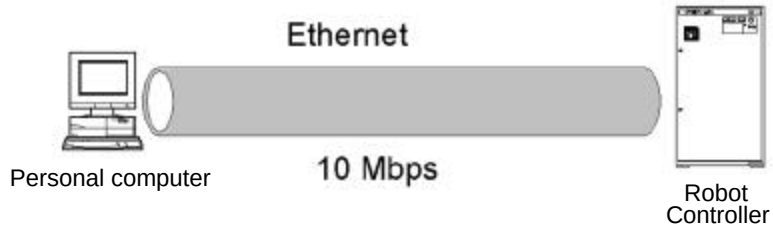
3.2 Features of Ethernet Communications

The Ethernet I/F board and the "Ethernet" function of the MotoDCI32 transmit data at higher than normal speeds.

■ *High speed transmission*

In comparison with transmissions using RS232C, higher speed transmissions are possible with the Ethernet.

When Ethernet is used:



When RS232C is used:

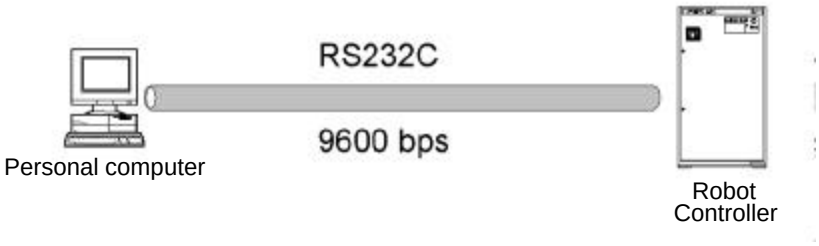


Fig.1 Transmission Speed

Note!
The above transmission speed is the communication speed between network devices, not including the time used for format check of transmitted data, etc.

■ *Transmissions between a multiple number of HOSTS*

As N:N transmission is possible with an Ethernet cable, the following system configurations can be prepared.

Note!
Refer to paragraph "Restrictions" with the following Configuration Examples.

✔ Configuration Example 1

Since an Ethernet cable can be connected to a multiple number of network devices, the factory operation state and alarm occurrences can be monitored from several places.

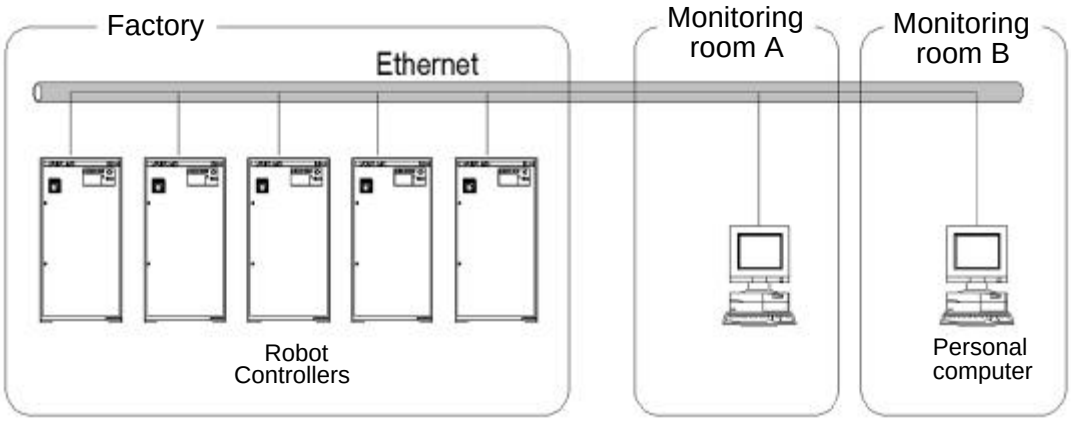


Fig.2 Configuration Example 1

✔ Configuration Example 2

By connecting the LANs of different factories with one Ethernet cable, transmission in each factory can be executed simultaneously. The transmission between the robot controller and the personal computer in factory A does not interfere with the transmission between the robot controller and the personal computer in factory B.
Transmission can also be done between factories. (In both cases, the settings should be correct.)

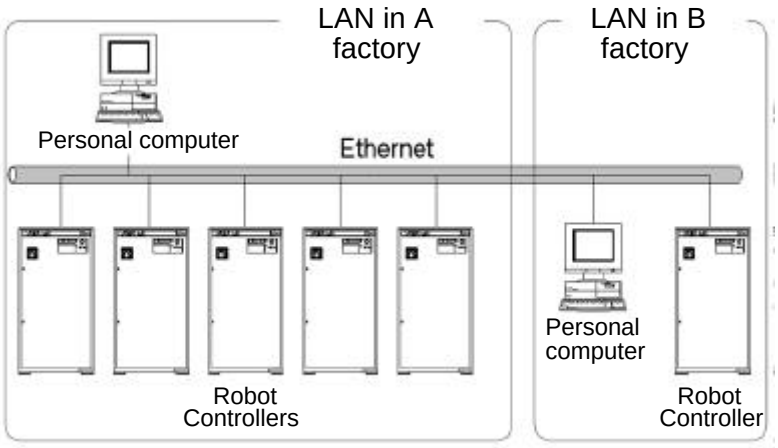


Fig.3 Configuration Example 2

✔ Configuration Example 3

With the Ethernet cables, the job on a personal computer can be executed on the robot controller by installing a personal computer for each production line and transferring the job from the personal computers to the robot controller. Then, by connecting one personal computer to the Ethernet cables in all the production lines, monitoring of the state of all the production lines and data backup can be executed.

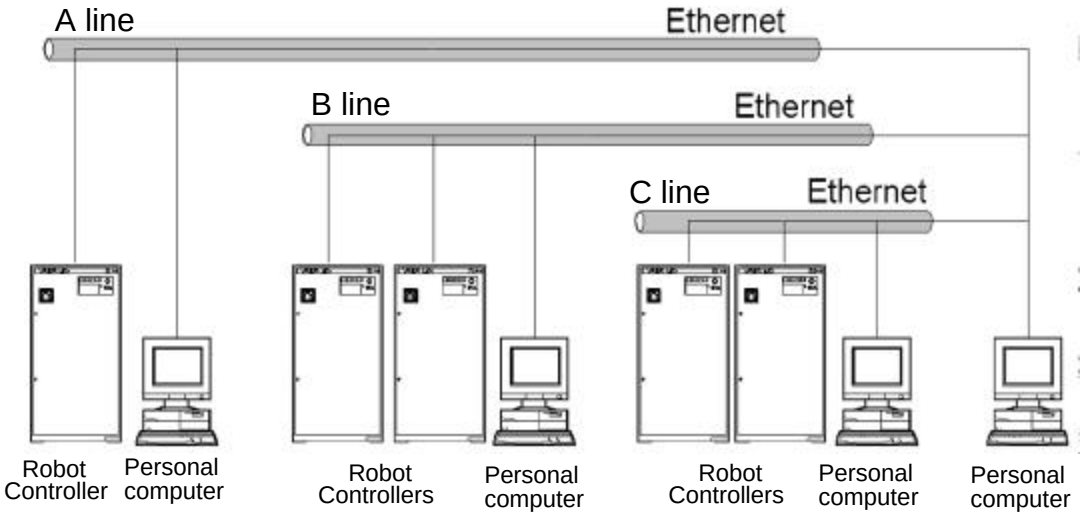
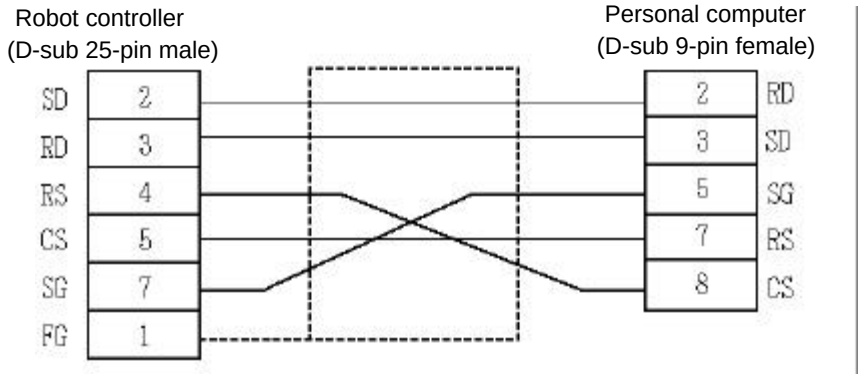


Fig.4 Configuration Example 3

Note!
When using an Ethernet cable, the RS232C cable is not required.

The cable connection for communications via RS232C is shown in figures below.

(IBM PC/AT)



(PC9801)

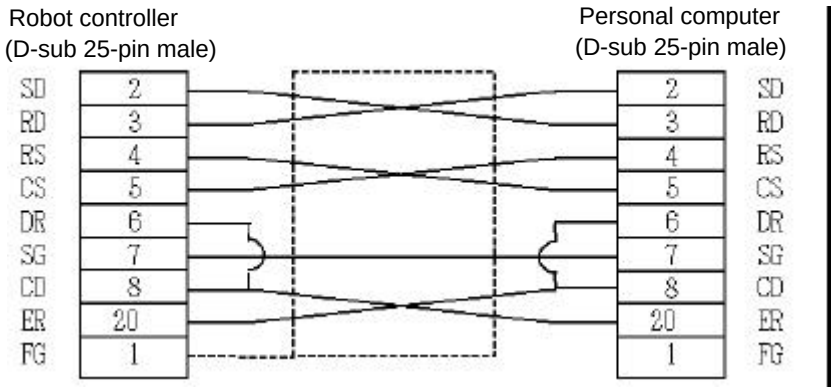


Fig.5 RS232C Cable Connection

3.3 Hardware Lock Key

For proper operation, connect the attached hardware lock key to the personal computer.

Two types of hardware lock keys are available :

✔ Anphenole type

✔ D-sub type

Normally, a D-sub type hardware lock key is attached.

Connection when using a PC-AT compatible personal computer

When using a PC-AT compatible personal computer such as a PC98-NX series NEC personal computer, connect the hardware lock key to the printer port.

Connection when using a personal computer other than PC-AT compatibles

When using an anphenole type hardware lock key, the form of printer port differs depending on the computer model. Connect the key as shown in the figure below "Anphenole Type".

When using a D-sub type hardware lock key, install a conversion adapter between the printer port of the personal computer and the hardware lock key. The conversion adapter should be prepared at customer side. See figure.

✔ Anphenole Type

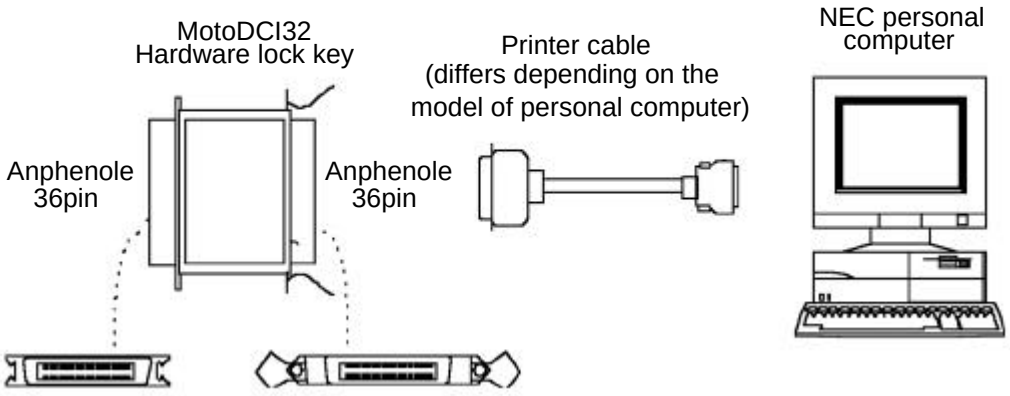
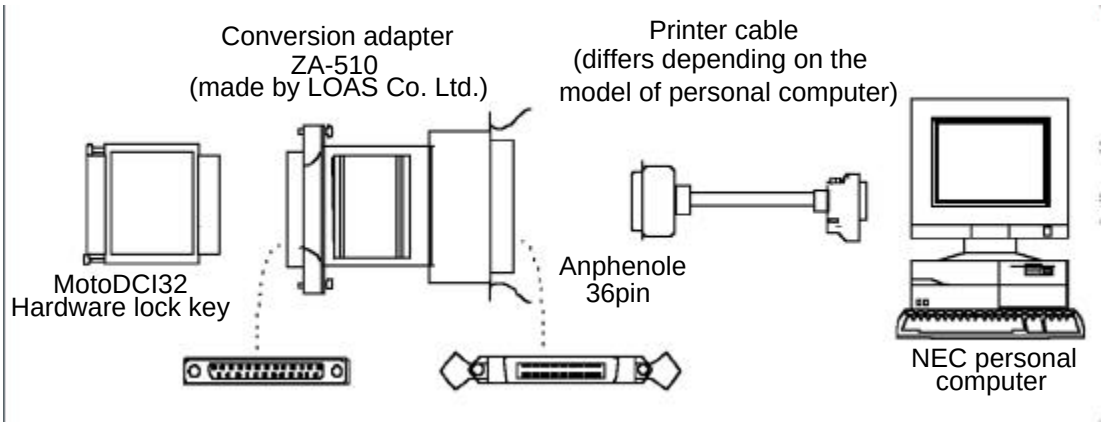


Fig.6 Hardware lock key anphenole type

✔ D-sub Type



4. SETUP

4.1 Execution of setup program

■ ***Set up the MotoDCI32 in the following manner.***

1) Turn ON the power to the personal computer and the display.

2) Start up Windows.

3) Insert the MotoDCI32 installation CD-ROM into the CD-ROM drive.

4) Click the [Start] button in the task bar and select [Setting]. Double-click the [Add/Remove Programs] icon from [Control Panel]. The [Add/Remove Programs Properties] display appears.

Add/Remove Programs Properties
Install/Uninstall
Windows Setup
Startup Disk
To install a new program from a floppy disk or CD-ROM drive, click Install.
Install...
The following software can be automatically removed by Windows. To remove a program or to modify its installed components, select it from the list and click Add/Remove.
InstallShield3 International East
Rotsy for Windows
ROTSY-PAL
Add/Remove...
OK
Cancel
Apply

Fig.7 [Add/Remove Programs Properties] Display

5) Click the [Install] button and follow the instructions in the display to set "setup.exe" of the CD-ROM drive. The [Run Installation Program] dialog box appears.

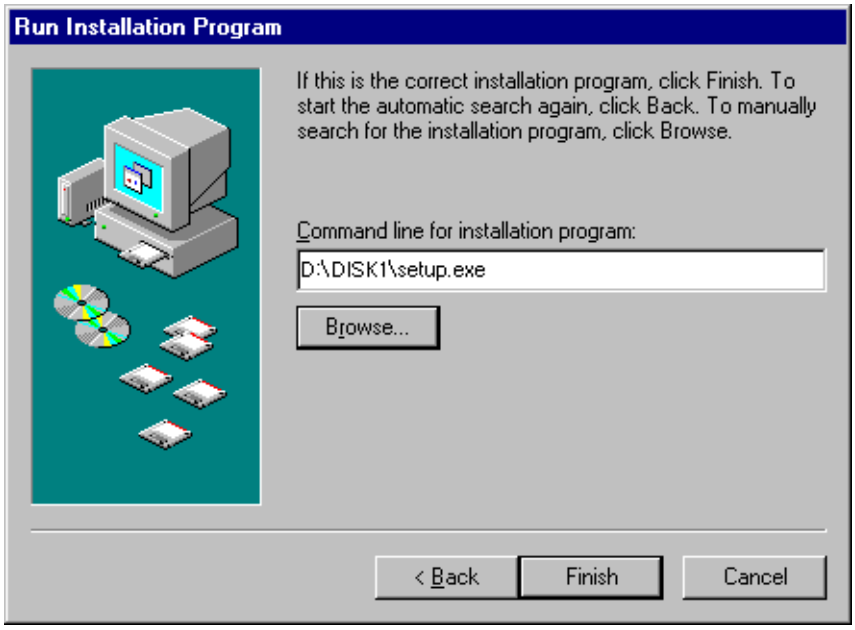

Run Installation Program
If this is the correct installation program, click Finish. To start the automatic search again, click Back. To manually search for the installation program, click Browse.
Command line for installation program:
D:\DISK1\setup.exe
Browse...
< Back
Finish
Cancel

Fig.8 [Run Installation Program] Dialog Box

6) Clicking the [Finish] button calls up the setup program. Follow the instructions in the proceeding display.

7) When the setup is completed, [MotoDCI32] is registered under [MotoDCI32] folder that appears by clicking the [Start] button in the task bar to select [Program] and then [Motoman].

Note!
To re-install the MotoDCI32 for some reasons, select [MotoDCI32] in the [Add/Remove Program Properties] Display shown in the Fig. and delete all the MotoDCI32 application files before starting re-installation.

4.2 Environmental Settings for Use of Ethernet

The following configurations are required for Ethernet transmissions. These settings are not necessary for the RS232C communication. Refer to "Operation

4.3 Environment MotoDCI32 Application Settings

To communicate with the robot controller, set the IP address etc., as a transmission parameter.

4.4 Personal Computer Settings

Set the settings related to Ethernet transmissions, to the personal computer with the software installed.

■ *Hardware settings*

Before using the MotoDCI32, connect the Ethernet board to the personal computer and check if the Ethernet board operates correctly.

For connection methods, refer to the manual for the Ethernet board used.

■ *Windows Network settings*

To communicate via the Ethernet, set the settings related to the Windows network. Click the [Start] button in the task bar and select [Setting]. Double-click the Network" icon from [Control Panel]. The [Select Network Component Type] Dialog box appears.

Note!
The example below is based on Windows95.

1) Click the [Add] button. The [Select Network Component Type] dialog box appears.

2) Select [Adapter] from the list and click the [Add] button to set the Ethernet board for adapter. Choose the network adapter that is added to the personal computer as mentioned in "Hardware setting".

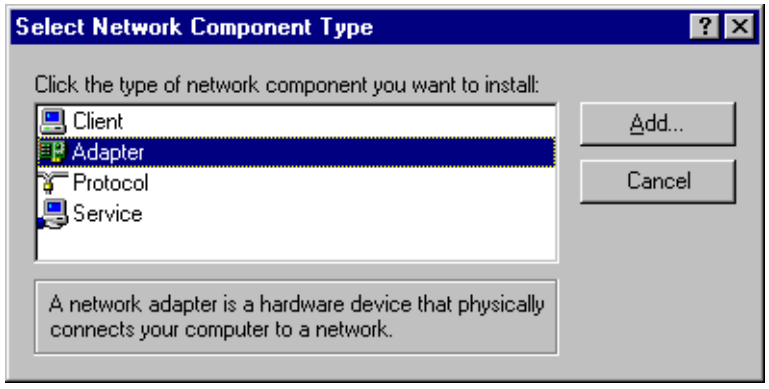


Fig.9 Selecting Adapter

3) Select the [Protocol] from the list and click the [Add] button, to set protocol. The [Select Network Protocol] dialog box appears.

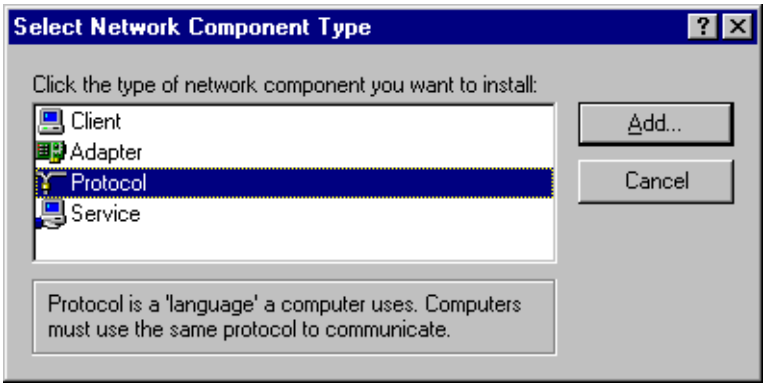


Fig.10 Selecting Protocol

4) Select [Microsoft] as manufacturers and [TCP/IP] as Network Protocol and click the [OK] button.

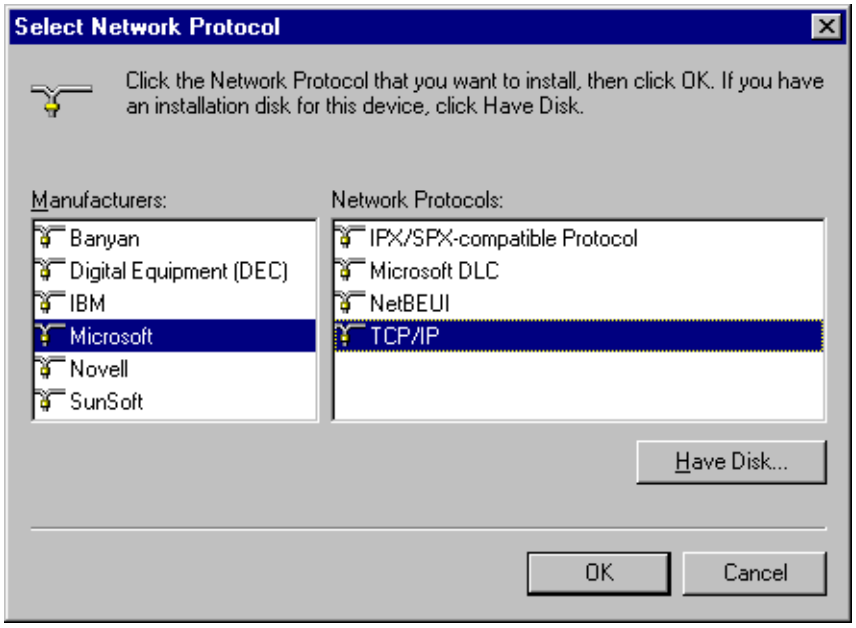


Fig.11 [Select Network Protocol] Dialog Box

5) The [Network] dialog box appears. To set the IP address and subnet mask for the personal computer, select [TCP/IP] protocol from the list and click the [Properties] button.

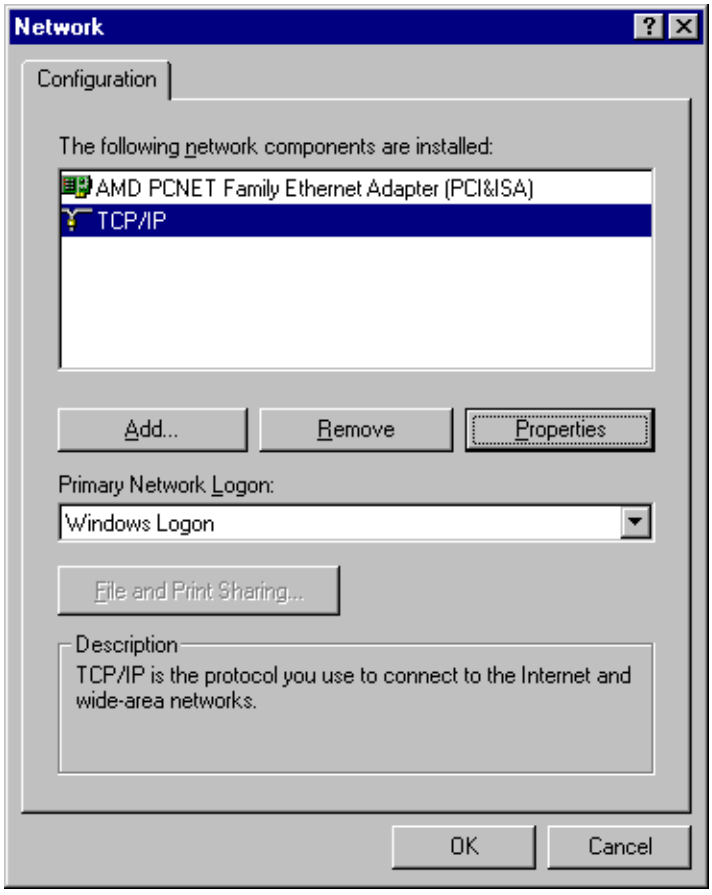


Fig.12 [Network] Dialog Box

6) The [TCP/IP Properties] dialog box appears. Input the value for the [IP address] and [Subnet Mask] of the personal computer. For details of the settings of Gateway and DNS, refer to a Windows manual, to make proper settings for the application.

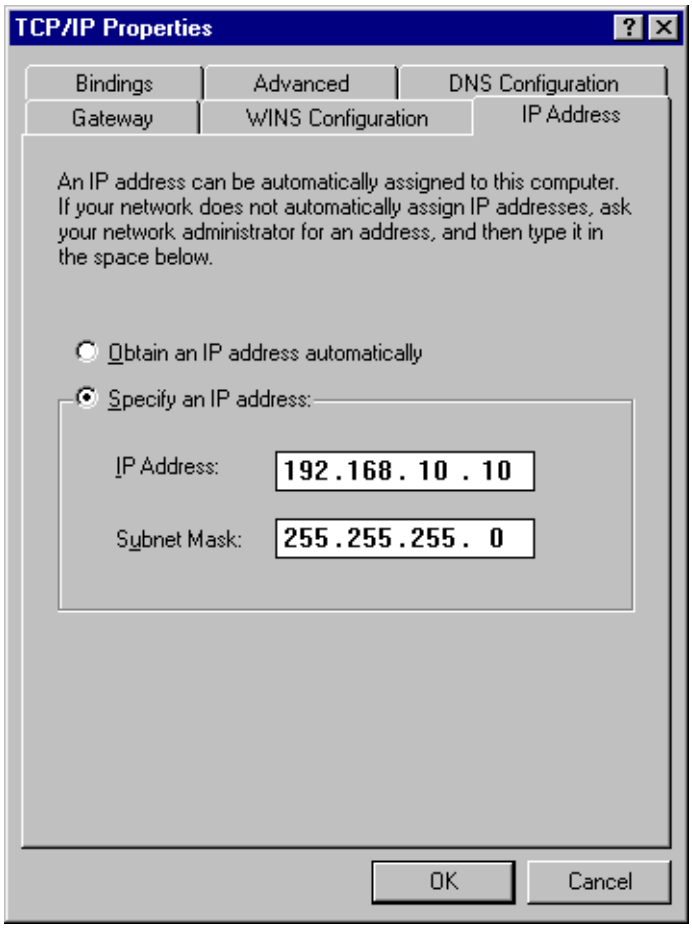


Fig.13 [TCP/IP Properties] Dialog Box

Note!
The above values are examples only. When setting the IP address and subnet mask, input the correct numbers as advised by the network manager. An incorrect setting such as assigning the same IP address to different personal computers may cause problems in communication.

4.5 Robot Controller Setting

■ *Hardware settings*

To communicate using TCP/IP protocol, an Ethernet I/F board for YASNAC XRC/MRC is required. Insert the board, and set the IP address and subnet mask.

To setup the Ethernet I/F board, refer to the "YASNAC XRC/MRC Ethernet I/F Board
Instructions".

■ *Parameter settings*

To establish communication between the robot controller and the personal computer, set the following parameters of the robot controller.

✔ Transmission protocol designation

RS000 = (*) Protocol designation for Std. port #1

RS001 = (*) Protocol designation for Std. port #2

(*) Settings for parameter RS000 / RS001 :

0 : Not used

1 : System reserved

2 : BSC LIKE protocol (used for data transmission)

3 : FC1 protocol

These parameters are used to designate the transmission protocol for Std port #1, port #2 or the Ethernet board for the robot controller. If the Ethernet communication function is not to be used, RS000 and RS001 correspond to the Std port #1 and port #2 respectively as the above.

When the Ethernet communication function plus either Std port #1 or port #2 are used, parameters according to this port number must be set. Any other parameters can be used for Ethernet communication.

To use the MotoDCI32, set RS000 or RS001 to the value "2".

For example, if port #1 is already used for FC1 or FC2 and its parameter RS000 is set to the value "3," RS001 is required to be set to the value "2" to use the MotoDCI32.

Note!
RS000/001 parameters cannot have the same setting.

Ethernet communication function only supports the BSC LIKE protocol.

Some parameters have to be set in "Maintenance mode" using the programming pendant.

✔ **Customer options**

I/O = Not used

Command mode = Used (This must be always set to "Used".)

PP/PBOX (programming pendant / playback box)= Not used

✔ **Ethernet**

Ethernet = Used

IP ADDRESS = 192.168.10.10*

SUBNET MASK = 255.255.255.0*

DEFAULT GATEWAY = 192.168.10.1*

SERVER ADDRESS = 192.168.10.11*

* The above values are examples only. Input the suitable values according to your network environment.

4.6 Network Setting

To communicate with the robot controller using the MotoDCI32, the network must be set up correctly.

For details on how to setup the network, refer to "YASNAC XRC/MRC Ethernet I/F Board Instructions".

4.7 Restrictions

When using the MotoDCI32, pay attention to the following restrictions.

4.8 YASNAC XRC/MRC and PC Restrictions

■ *The port used for TCP/IP*

The MotoDCI32 uses TCP/IP for the communication protocol. To communicate in TCP/IP, the service identification numbers called "Port No" are used internally, while MotoDCI32 uses the port numbers from 10000 to 10008 for the data transmission.

When these numbers overlap with the numbers used for other network devices, correct communication cannot be performed.

To use the MotoDCI32, be sure in advance that any network device in the same network does not use the above explained port numbers.

4.9 Personal Computer Restrictions

■ Same file access

The same file in the personal computer cannot be accessed from different robot controllers simultaneously.

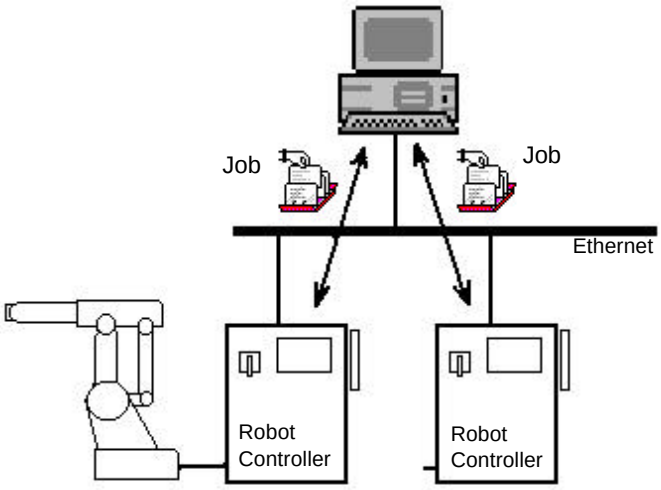


Fig.14 Access to the Same File by Multiple Robot controllers not Possible

4.10 YASNAC Robot Controller Restrictions

■ Multiple personal computer access

With the MotoDCI32, one personal computer can communicate with one robot controller. Simultaneous communication with a multiple number of personal computers is not possible.

(On the contrary, the simultaneous comunication between one personal computer and a multiple number of robot controllers is possible.)

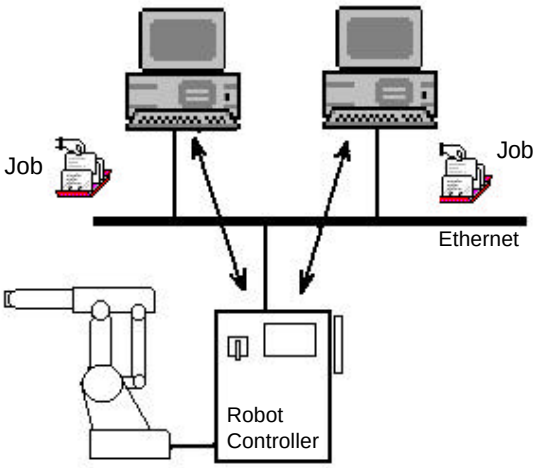


Fig.15 Access from a Multiple Personal Computers not Possible

■ CMOS batch storage

The BSC LIKE protocol and the FC1 protocol are available for the controller to communicate with external devices. The MotoDCI32 uses the BSC LIKE protocol for transmission. As the CMOS batch storage uses the FC1 protocol, CMOS batch storage is not available in the MotoDCI32. For CMOS batch storage, use the YASNAC FC1/FC2.

4.11 Execution of MotoDCI32 Programs

The MotoDCI32 program consists of two programs; [MotoDCI32] and [YASNAC Help]. To execute each program, select the application to be executed from the start menu.

4.12 High Speed Link Server

The High Speed Link Server is used for communication via the Ethernet. It is not used
for communication via RS232C.

The following explains the High Speed Link Server.

■ *Server*

To communicate with a robot controller via the Ethernet, a server program (HSLSR32.EXE) is required.

The server receives a request from the MotoDCI32 and sends/receives the data. The server program is started up from VRP32.dll when the MotoDCI32 starts to communicate with the robot controller.

When the transmission is finished, right-click the [High Speed Link Server] in the task bar to display the menu. Click the [Exit] button from the menu to exit the server program.

To communicate between a personal computer and a robot controller, the server program and the related DLL files have to be located in the same folder as the MotoDCI32.

■ *Communication Status Monitor*

The [Communication Status Monitor] display appears when the MotoDCI32 is started up.

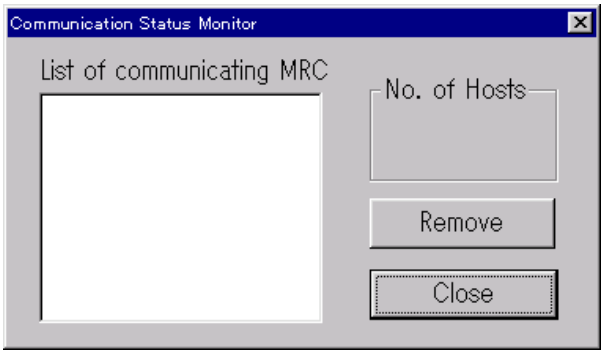


Fig.16 [Communication Status Monitor] Display

To hide the [Communication Status Monitor] window for some reason (for example, to work on by another operation), right-click the [High Speed Link Server] in the task bar to display the menu. Select [Monitoring] from the menu to switch the [Communication Status Monitor] display ON and OFF.

■ *Deletion of transmission information*

If a Ethernet transmission error occurs for any of the following reasons during communication, the transmitted information may sometimes remain in the robot controller and/or the personal computer.

✔ The Ethernet cable is removed during transmission.

✔ The [REMOTE] button on the playback box of the robot controller is turned OFF during transmission.

If the transmission cannot be continued, reset the information to be transmitted by the following procedures.

4.12.A Robot Controller side

1) Press the [RESET] key if any error message is shown in the display of the programming pendant.

2) Turn OFF the [REMOTE] button on the playback box once and then turn it ON again.

4.12.B Personal Computer side

1) Press the [Remove] button in the "Communication Status Monitoring" window.

2) To reset information, input the IP address of the robot controller where the error occurred, and press the [OK] button.

4.13 Editing of Language Files

■ Editing Language Files

In the "Select Language" dialog box, press the [Edit] button. The language file of the currently selected language is opened in the Windows **Notepad**. Using **Notepad**, the language file can be edited.

Note!
Since the language files are important parts of the software, extreme care must be taken during modification.

■ Creating New Language Files

<Adding another language>
Modification can be carried out from the use of Windows **Notepad**.
If you want to add a language which is not yet available, follow the instructions below:

✔ **[Example : Chinese]**

a) Copy the "English.lng" file, then rename it "User13.lng".

Note!
Do not rename it "Chinese.lng".

b) In the "User13.lng" file, change "English" to "Chinese" and place the Chinese
language translation of each word in the file.

c) If you want to add more languages, continue with "User14.lng" and so on.

Note!
The new languages are not displayed under the "System" language. By selecting "User13," the Chinese language appears.

5. MotoDCI32 operation

Using DCI (Data Communication by Instruction) transmitting function, any job in the controller can be transmitted.

If the robot memory runs short because there are too many types of workpieces or a job becomes excessively long due to a complicated job, a personal computer can be used as an external memory. In such a case, the DCI instructions can be used to upload/download jobs.

5.1 Startup

To start up the [MotoDCI32], click the [Start] button and point to [Program], and select [Motoman], and then [MotoDCI32]. The [Select Language] display appears as shown in Fig. 4.1. Select a desired language and click the [OK] button. The language can be changed at any time from the main menu of this application.

Fig.17 [Select Language] Display

By marking the box [Ignore language selection at program start], the [Select Language] window is not displayed when starting the the application. This can be changed at any time by selecting [Select Language] from the main menu of this application.

5.2 Operation of MotoDCI32

When MotoDCI32 is executed, the following display appears.

■ Run

Pressing the run button makes the MotoDCI32 wait for a request from the controller. Depending on instructions used in the controller, jobs will be transferred from/to the controller.

Note!
During automatic operation, the grayed functions in the display such as robot change cannot be used.

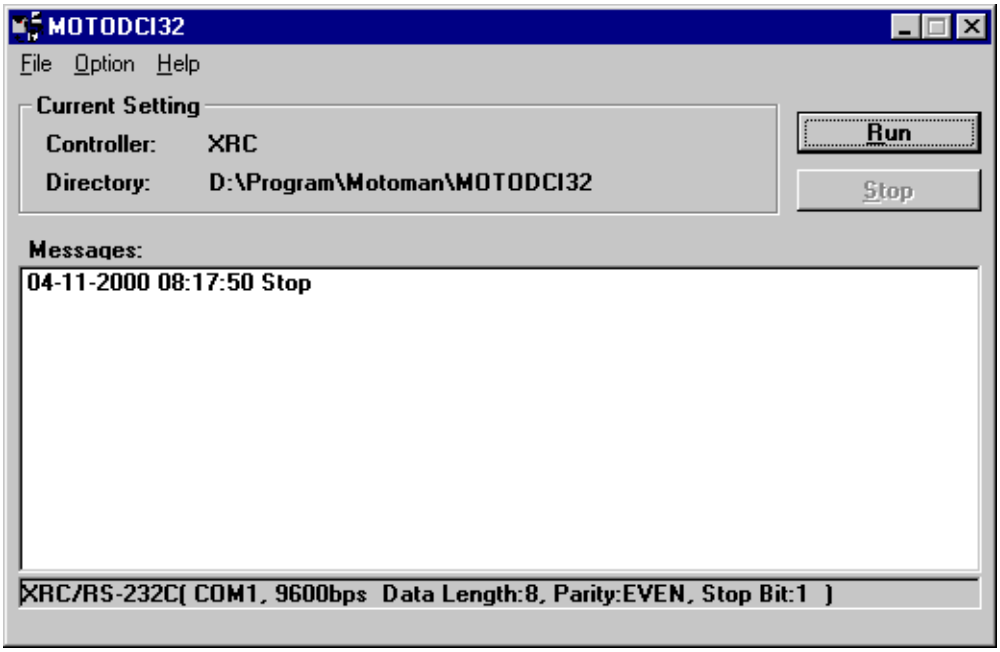


Fig.18 MotoDCI32 Main Menu

■ Stop

Terminates run mode. Normally, stop the DCI operation first from the controller side. If the personal computer is terminated first, an alarm may occur on the controller side.

Note!
It may take some time until the stopped status is actually entered after the stop button is pressed.

5.3 Option Menu

The following functions are provided in the option menu.

5.3.A Operation Environment

The environmental settings define the settings for the personal computer. Selecting this menu calls up the display shown in fig. Set each item in this display.

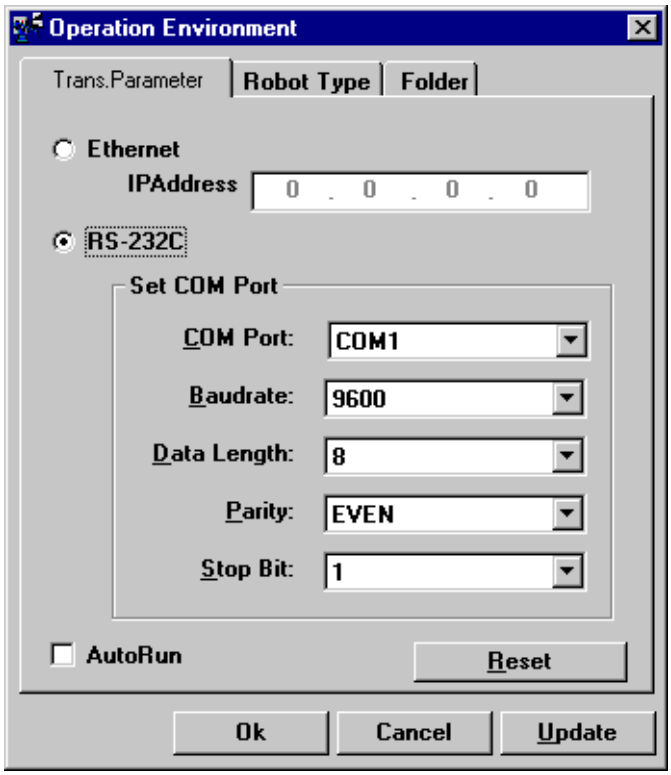


Fig.19 Setting Transmission Parameters

■ *(1) Setting transmission parameters*

Select the controller and communications protocol and choose their settings as shown in fig. There are two types of communications; the Ethernet and RS-232C transmission. Click the radio button to select one.

✔ Communications parameters for Ethernet transmissions:

Only the IP address can be set for the Ethernet transmission. Enter the IP address assigned to the controller connected to the network.

✔ Communications parameter for RS2-233C transmissions:

Select the port number, baud rate, data length, parity, and stop bit according to the controller settings. Click the "Reset" button to set to the default data.

■ *(2) Selecting the robot model*

Select the controller model for transmission in the display shown in the fig.

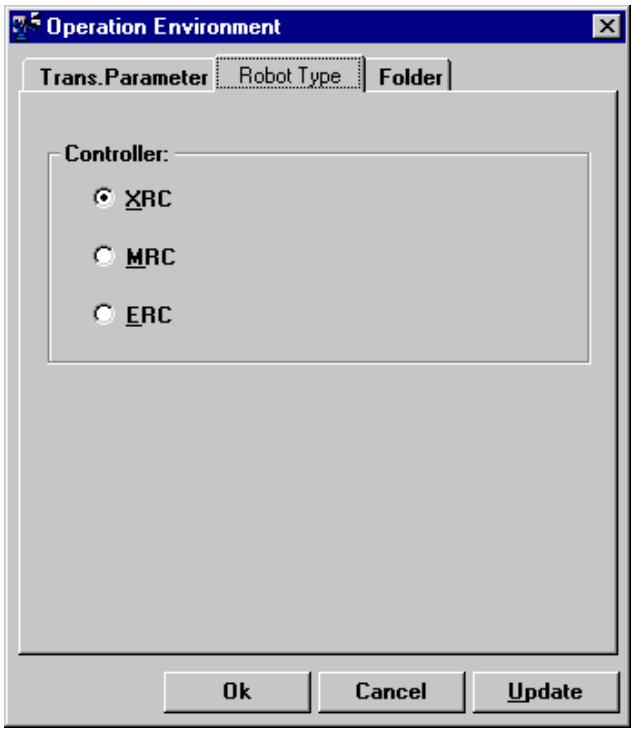


Fig.20 Selecting a Robot Model

■ *(3) Selecting a folder*

Select the folder for communications in the display shown in Fig. 4.5. Once the drive and folder are specified in this display, the files transferred with the commands LOADJ and SAVEJ are retrieved/stored here.

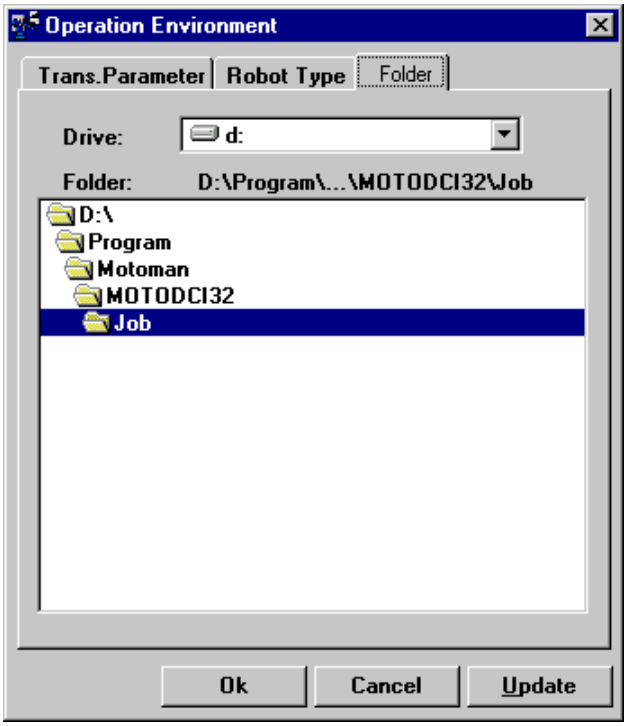


Fig.21 Selecting a folder

5.4 Display Logging File

Displays the contents of a log file.

5.5 Clear Messages

Deletes the run mode messages. Messages are deleted periodically by the program.

5.6 Auto Run

Determines whether run mode is to be entered at the same time as startup of MotoDCI32. A check mark at the left side of the menu means that run mode will be entered.

5.7 Write Logging Message

Determines whether a communication log is to be taken at run mode. A check mark at the left side of the menu means that the log is going to be taken. A log file is created in the directory where the MOTOCOM32 is installed with the name of "ONLINE.LOG". The program is overwritten when this file exceeds a certain size.

5.8 Select Language

Change the language displayed in the application according to the environment. Selecting this menu displays the Select Language dialog box.

Fig.22 [Select Language] dialog

Note!
Some languages may not be correctly displayed unless fonts are set correctly.

6. Help Menu

The following functions are provided in the Help menu.

6.1 MotoDCI32 Help

Starts up the on-line help to explain the MotoDCI32.

6.2 YASNAC Help

Starts up the on-line help to explain the robot transmission commands, transmission instructions, alarms, and interpreter messages.

6.3 Version Information

Displays the version information.

6.4 MotoDCIShell32 OPERATION

MotoDCIShell32 is a optional software for managing several clients of MotoDCI32.
MotoDCIShell32 includes tools for installing, starting/stopping and setting environmental settings for the clients.

6.5 Operation of MotoDCIShell32

When MotoDCI32 is executed, the display of fig appears.

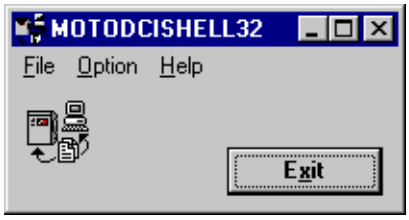


Fig.23 MotoDCIShell32 Main Menu

6.6 Register clients

To register the serial and check no. included in the software package, proceed as follows.

1) Click [File], [Register Serialno. …]. The Register dialog appears.

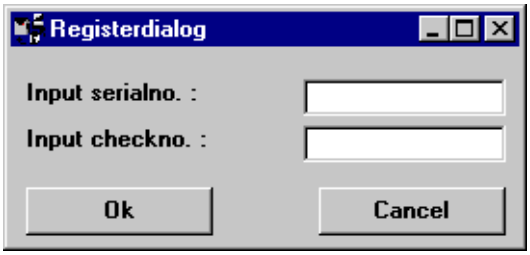


Fig.24 The register dialog

2) Input the values and click [Ok].

6.7 Installing clients

To install the clients proceed as follows.

1) Click [Option], [Install…]. The No. of Robots dialog appear.

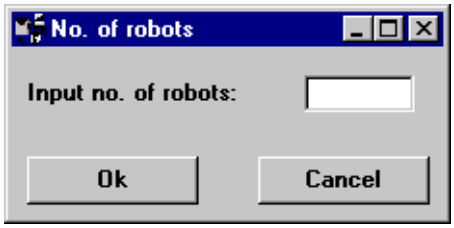


Fig.25 The No. of Robots dialog

2) Input the number corresponding to the number of registered clients, click [Ok].

3) MotoDCIShell32 will now install the clients.

6.8 Starting/Stopping clients

To start/stop one or more clients click [Option], [Start]/[Exit], then choose [Rbtxx]/[All].

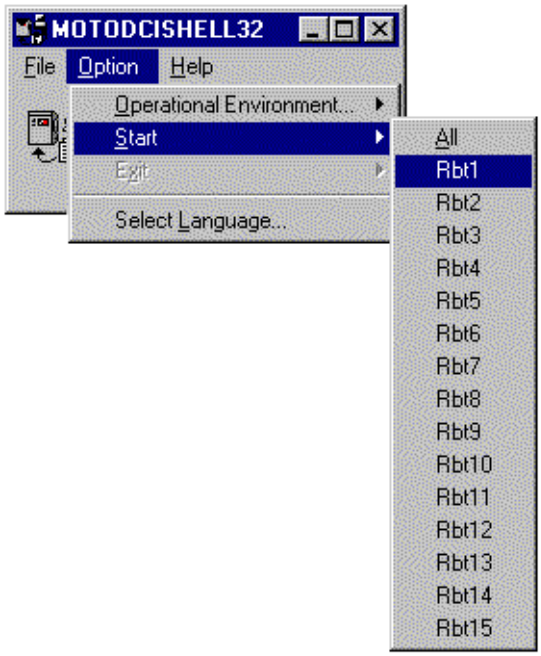


Fig.26 The No. of Robots dialog

Note!
When a client is in run mode this has to be canceled before exiting.

6.9 Auto Run at Reboot

For your convenience it is possible to automaticly start all clients when a reboot is done on your server.

Put the MotoDCIShell32.bat located in the application-folder in the startup-folder. The switch /a starts all installed clients.

Note : When using Windows95 and Ethernetcommunication, use MotoDCIShell32E.bat.
For the clients to automaticly enter run mode, please check the Auto Run checkbox in the Operation Environment dialog for all the clients.

Notes

Headquarters:

Sweden — **MOTOMAN** Robotics Europe AB
Box 504, SE-385 25 Torsås, Sweden
Tel: +46-486-48800, +46-486-41410

Group companies:

France — **MOTOMAN** Robotics SARL
Rue Nungesser et Coli, D2A Nantes-Atlantique, F-44860 Saint-Aignan-de-Grand-Lieu, France
Tel: +33-2-40131919, Fax: +33-40754147

Germany — **MOTOMAN** Robotec GmbH
Kammerfeldstraße 1, DE-85391 Allershausen, Germany
Tel: +49-8166-90-0, Fax: +49-8166-90-103

Germany — **MOTOMAN** Robotec GmbH
Im Katzenforst 2, DE-61476 Kronberg/Taunus, Germany
Tel: +49-6173-60-77-30, Fax: +49-6173-60-77-39

Great Britain — **MOTOMAN** Robotics UK (Ltd)
1 Swan Industrial Estate, Banbury, OXON OX16 8DJ, England
Tel: +44-1295-272755, Fax: +44-1295-267127

Italy — **MOTOMAN** Robotics Italia SRL
Via Emilia 1420/16, IT-41100 Modena, Italy
Tel: +39-059-280496, Fax: +39-059-280602

Netherlands — **MOTOMAN** benelux B.V
Zinkstraat 70, NL-4823 AC Breda, Netherlands
Tel: +31-76-5424278, Fax: +31-76-5429246

Slovenia — **RISTRO d.o.o.**
Lepovce 23, SI-1310 Ribnica, Slovenia
Tel: +386-61-861113, Fax: +386-61-861227

Spain — **MOTOMAN** Robotics España S.A.
Avenida Marina 56, Parcela 90, ES-08830 St. Boi de Llobregat (Barcelona), Spain
Tel: +34-93-6303478, Fax: +34-93-6543459

Sweden — **MOTOMAN** Mecatron Robotic Systems AB
Box 4004, SE-390 04 Kalmar, Sweden
Tel: +46-480-444600, Fax: +46-444699

Distributors:

Czech Republic — **MGM Spol s.r.o.**
Trebízského 1870, CZ-39002 Tábor, Czech Republic
Tel: +420-361-254571, Fax: +420-361-256038

Denmark — **Robia A/S**
Hjulmagervej 4, DK-7100 Vejle, Denmark
Tel: +45-79428000, Fax: +45-79428001

Finland — **Robia Suomi OY**
Messinkikatu 2, FI-20380 Turku, Finland
Tel: +358-22145600, Fax: +358-22145660

Greece — **Kouvalias Industrial Robots**
25, El. Venizelou Ave., GR-17671 Kallithea, Greece
Tel: +30-1-9589243-6, Fax: +30-1-9567289

Hungary — **REHM Hegesztéstechnika Kft.**
Tápiószele, Jászberényi út 4., H-2766, Hungary
Tel: +36-30-9510065, Fax: +36-1-2562012

Israel — **KNT Engineering Ltd.**
9 Hapalmach Street, IL-Kfar Azar 55905, Israel
Tel: +972-35351945, Fax: +972-03535943

Norway — **ROBIA ASA**
Industriveien 1, NO-3300 Hokksund, Norway
Tel: +47-32252820, Fax: +47-32252840

Portugal — **Electro-Arco S.A.**
Rua Vice-Almirante Azevedo Coutinho 4, Venda Nova, PT-2700 Amadora, Portugal
Tel: +351-21-4968160, Fax: +351-21-4990319

South Africa — **Robotic Systems S.A. PTY Ltd**
P.O Box 90741, ZA-Bertsham 2013, South Africa
Tel: +27-11-4943604, Fax: +27-11-4942320

Switzerland — **Messer SAG**
Langweisenstrasse 12, CH-8108 Dällikon, Switzerland
Tel: +41-18471717, Fax: +41-18442432

MOTOMAN ROBOTICS EUROPE AB
a subsidiary of YASKAWA Electric Corporation